Safety Advisory Committee

July 10, 2015 1:30 – 3:00 PM

Minutes

| Committee Member | mittee Member Representing | |
|---------------------------------------|--|---|
| V. Potapenko, M. O. Leimer, J. Willen | Human Resources Advisors | X |
| Blodgett, Paul M. | Environment, Health and Safety Division | |
| Bluhm, Hendrik | Chemical Sciences Division | X |
| Broughton, Jeff | Computing Sciences Directorate | |
| Chernowski, John | Facilities Division | |
| Christensen, John N. | Earth Sciences Division | X |
| Dickerhoff, Darryl | Energy Technologies Area | X |
| Franaszek, Stephen | Genomics Division | |
| Greiner, Leo | Nuclear Science Division | |
| Haber, Carl | Physics Division | |
| Martin, Michael C. | Advanced Light Source Division | |
| Ravani, Shraddha | Life Sciences Division | X |
| Sauter, Nicholas | Physical Biosciences Division | |
| Schmid, Andreas | Materials Sciences Division | |
| Seidl, Peter | Accelerator Technology and Applied Physics Division; SAC Chair | X |
| Thomas, Patricia M. | Safety Advisory Committee Secretary | X |
| von der Lippe, Henrik | Engineering Division | |

Others Present: Ellen Ford, Mike Kritscher, Glenn Kubiak, Betsy MacGowan, Larry McLouth, Meredith Montgomery, Martin Neitzel, Andrew Peterson, Mark Scott, Tammy Welcome, Bill Wells, Kat Wentworth, Marty White, Jennifer Willen, Mike Wisherop

Comments from the Chair - Peter Seidl

Electrical Safety – The new, improved electrical safety program has been approved and launched. Paul Alivisatos, Glenn Kubiak, and Mark Scott met with the Qualified Electrical Workers (QEW) group to discuss. The Divisions need to take responsibility for making the program work. The Safety Advisory Committee will continue to be the venue to communicate researchers' concerns and recommendations.

Traffic and Pedestrian Safety - Glenn Kubiak

Speed limits have been decreased in construction zones. Some people are going too fast and not stopping for crosswalks. There will be a Today at Berkeley Lab article. At LBNL, bike riders are required to wear helmets. In California, bicycles must obey traffic laws, including stopping at stop signs. This is not the case in some other states. It is good to remind everyone.

EHS Pipeline - Mike Wisherop

| Revision | Documents | Program/Policy | Significance | Status |
|--|-------------------------------------|---|--------------|---|
| Туре | | | 3 | |
| Electrical Safety Program - Major Revision | RPM, ESH Manual | Electrical Safety Program | A | Program and Manual posted. Implementation of Program RPM Policy being updated by SME |
| Work Planning and Control – Phase in | RPM, ESH Manual | Work Authorizations | A | Program edited. With SME for review. RPM Policy to be updated by SME. |
| Fire Prevention – Full program re- write | RPM, ESH Manual | Fire Prevention | В | Being edited. Communications per implementation plan. RPM Policy to be updated by SME |
| Pressure Safety – major revision | RPM, ESH Manual | Pressure Safety | С | Major revision; final input from stakeholders, to be put in editing queue. |
| Training Program revisions – clarifications and minor changes | RPM, ESH Manual | ESH Training Program/Policy | D | With editing; user reviews complete; EHS leadership approved. |
| Aviation Safety Policy New | RPM | Aviation | D | Draft to be reviewed by interested users. |
| Change to Radiation Safety Program – Conversion to Rad Con Manual format | RPM/ESH Manual/Rad Can Manual | Radiation Safety, Environmental Radiation | D | Program content limited; used as a pass-through to new Rad Con Manual. Rad Con Manual reviewed and approved through RSC and EHS. Program in queue for editing. No new requirements. |

| Revision Type | Documents | Program/Policy | Significance | Status |
|---|------------|-------------------------------|--------------|--|
| Cranes, Hoisting and Rigging – minor change | ESH Manual | Cranes, Hoisting, and Rigging | E | Minor changes to inspection frequency requirements. Align with OSHA. Posted. |

| Revision Type | Documents | Program/Policy | Significance | Status |
|--|------------|-----------------------------------|--------------|---|
| Fall Protection Program Major Revision | ESH Manual | Fall Protection Program | С | With editing. Changes reflect current practice. SME working closely with users. |
| Elevated work surfaces Major Revision | ESH Manual | Elevated Work Surfaces Program | С | With editing. Changes reflect current practice. SME working closely with users. |
| Laser Safety Program Major Revision | ESH Manual | Laser Safety Program | TBD (C) | Laser safety committee has provided input and recommendations; SME is drafting. |

- The RPM policy for electrical safety is being updated to catch up to the program changes.
- The Work Planning and Control changes have been approved by the Lab Director and will be posted in the ESH Manual.
- Protective Services is preparing a crosswalk of changes to the Fire Prevention program.
- Stakeholder comments are being collected on the proposed Pressure Safety changes.
- The Training changes have been approved and are in editing. The changes focus on On-the-Job Training.
- Ross Fisher provided information about the proposed changes to the Aviation Safety program (committee members – see SAC Google Drive folder) DOE Order 440.2(c) requires permits for drone use and procurement controls.
- The Radiation Control (Rad Con) manual is being published. ESH Manual Chapter 21 will be an introduction to the Manual.
- The Crane/Rigging chapter will clarify the OSHA inspection requirements.

Electrical Safety - Mark Scott

The policy (ESH Chapter 8 and Electrical Safety Manual) was approved the week before the meeting. The new Electrical Safety home page was being drafted and links were being updated. (Please take a look at http://electricalsafety.lbl.gov/ and submit any comments to Mark Scott. LBNL has gone 269 days without an electrical shock incident. The increased emphasis on Lockout/Tagout and Test-Before-Touch is working.

John Christensen asked about the types of documentation required for QEW qualification. Mark Scott responded that EHS wants to see evidence of some formal training related to electrical work, which may include examples of work, certification by management, journeyman card, pictures of diplomas, transcripts, etc. There was a concern about protecting privacy of personal information on documents. Feedback has been constructive. Discussions about the type of work can result in suggestions of how to engineer out hazards so a QEW is not required. A person who is generally "qualified" to do electrical work must also be authorized to do specific activities.

There will be a Level 1 announcement from the Lab Director and an article in TABL. Kat Wentworth suggested engaging Creative Services in the effort to communicate.

Work Planning and Control – Andrew Peterson

We are making progress in implementing Work Planning and Control (WPC). Over 1300 Activities have been initiated (731 are Active). Of these, there were at least 400 Level 3 high-hazard Activities initiated (200 Active).

LBNL has a commitment to convert at least 90% of our Activity Hazard Documents into WPC Activities by September 30. There were 46 AHDs remaining (a 72% reduction). Materials Sciences had the largest number of AHDs.

Radiological Work Authorizations (RWAs) are not going away at this time. The WPC and RWA systems are running in parallel.

Over 3500 workers have been added to at least one WPC Activity. Over 1000 Job Hazard Analyses (JHAs) have been closed. The Office of the CFO has fully transitioned from JHA to WPC, and the Energy/Environmental Technologies group is almost there. After July 15, no new JHAs will be created without special permission from John Heim.

The new ESH Manual Chapter 6 will be posted in August.

Representatives from Argonne, Stanford, and Lawrence Livermore will be visiting August 11-12 to evaluate the WPC system. Feedback is also being gathered by user focus groups and user surveys. Several Divisions are planning to do Focus Area Self-Assessments of WPC.

There has been an issue of non-LDAP access. Advanced Light Source and 88" Cyclotron users don't have LDAPs. They could use their employee ID to access the JHA system. EHS is working with Information Technology and Human Resources to find a solution. An email account is needed to receive notifications from WPC and Berkeley Lab Training.

Reactive Chemicals Management Assessment – Larry McLouth

The reactive chemicals management assessment was prompted by incidents at UC and the Molecular Foundry. The assessment team was composed of EHS Industrial Hygiene and peer researchers. The team looked at training, qualifications, inventory management, and change management. They identified about 50 chemical synthesis operations of interest, and looked at a sample of 8 of them. They looked at operations in Environmental Technologies, Chemical Sciences, and Materials Sciences.

Good management practices they identified included:

- pre-screening of worker qualifications;
- use of WPC to document OJT;
- working alone prohibitions for pyrophoric use;
- policies for scaling up processes;
- use of dedicated, locked flammables cabinets;
- regular clean-out of surplus chemicals; and
- discussion of waste management in WPC Activities.

Recommendations for improvements included enhancing the Chemical Management System to send out alerts for peroxide testing and other information, and improving the capacity of Waste Management to handle chemical clean-outs.

The WPC system has some useful capabilities, such as uploading processtraining videos, which are not widely known yet. Activity Leads need to understand their operating limits and revise their Activities when they anticipate significant changes.

The assessment team will be working with the Division Directors, the Chemical Safety Subcommittee, and the Safety Culture Committee to help publicize the report findings.

The meeting was adjourned at 3:00 PM Respectfully submitted, Patricia M. Thomas, SAC Secretary